COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ANALYSIS OF THE "LEAST COST)
PLANNING EVALUATION" SUBMITTED BY) CASE NO. 9696
KENTUCKY-AMERICAN WATER COMPANY)

ORDER

In Case No. 9283, Notice of Adjustment of The Rates of Kentucky-American Water Company ("Kentucky-American"), the Public Service Commission ("Commission") directed Kentucky-American to reevaluate its role in encouraging the efficient use of water resources and to evaluate the role of programs to reduce demand in the system-planning process. The purpose of the study was to evaluate the costs and benefits to the ratepayers of programs to encourage water conservation and to determine the value of incorporating programs to reduce demand into the system planning process.

The Order, issued October 1, 1985, required Kentucky-American to submit a plan detailing the process and schedule for this study within 90 days. The final report was to be filed with Kentucky-American's next rate case.

In response to a petition for rehearing filed by Kentucky-American on October 18, the Commission acknowledged the difficulty of linking the submission of the study with the submission of a general rate application. For this reason, the Commission modified its Order of October 1 to separate the schedule for the

study from the submission of a general rate application. Procedurally, the Commission decided to treat the project as an independent study with Commission participation. Kentucky-American employed a consulting firm, Economic and Engineering Services ("EES") of Bellevue, Washington, to conduct the evaluation.

On May 2, 1986, the Scope of Work for the <u>Least Cost Planning</u>

<u>Evaluation</u> was accepted as final. The intervenors in Case No.

9283 were notified and encouraged to participate on an informal basis during the course of the study. On June 30, the intervenors in Case No. 9283 were sent copies of a flow chart that identified the programs being considered by Kentucky-American in the <u>Least</u>

<u>Cost Planning Evaluation</u>.

Meetings were held on June 5, August 7, and September 3 with the Commission, representatives of Kentucky-American and EES, and Commission staff to discuss the progress on the <u>Least Cost Planning Evaluation</u>. Kentucky-American also integrated the evaluation with its long range capital investment plan.

During the course of this evaluation Kentucky-American submitted a draft of the Comprehensive Planning Study ("CPS"), its long term plan for capital investment, for review by the Commission. Kentucky-American also decided to combine the recommendations from the Evaluation and CPS into one document.

The Commission has established Case No. 9696 to analyze the initial findings and recommendations presented by EES. A hearing in this case was held on January 6, 1987. The Lexington-Fayette Urban County Government ("Urban County") and the Attorney

General's Office ("AG") intervened in this matter and participated in the hearing.

Witnesses for Kentucky-American prefiling testimony and appearing at the hearing were: Edward W. Limbach, President of Kentucky-American; Robert A. Edens, Vice President and General Manager of Kentucky-American; John S. Young, Jr., Director of Engineering Design for the System Engineering Office of American Water Works Service Company; and Gary S. Saleeba of EES.

The purpose of this case is to assist the Commission in finalizing its recommendations to Kentucky-American on implementation. The Company integrated the least cost planning concept with the traditional capital investment planning. As a result, the Least Cost Planning Study and the Comprehensive Planning Study were presented as one document. The Commission will consider only the Least Cost Planning Study in this Order. Any major capital expenditure must be considered in a Certificate of Convenience and Necessity case.

During the hearing Urban County asked questions about the projected water use of Toyota, the confidence level of demand projections, curtailment plans, rate schedules and rate design. The AG asked questions about the cost to implement the non-conventional options and the timing of future rate cases. The AG was also interested in Kentucky-American's efforts to encourage water recirculation by industrial customers such as Toyota.

All the witnesses who presented testimony at the hearing recommended continued use of the leak detection van, more educational programs and changes to the state plumbing code to

require the use of water efficient fixtures, as methods of encouraging the efficient use of water resources.

The Commission has supported the continuing use of the leak detection van by including it in rate base during the last rate case.

Kentucky-American has made a commitment to the Commission that it will file a 5-year education plan during the first quarter of 1987. This 5-year plan will increase Kentucky-American's role in public education. The Commission commends Kentucky-American on its attitude toward public education.

The Commission has indicated its support for plumbing code changes through meetings to present the proposed changes to the State Plumbing Committee and the State Housing Committee. The Commission also met with Mayor Scotty Baesler of Urban County to obtain support for the plumbing code changes.

The consulting firm recommended that a pilot project be initiated to determine the useful lives of retrofit devices, the initial penetration rates, changes in peak day usage from the devices and the long term penetration rates for devices.

The witnesses differed in their level of support for the pilot project. Mr. Limbach indicated he was somewhat neutral on conducting the pilot study. His initial impression is that the expense would exceed the benefit. Mr. Edens expressed an interest in the pilot project but was unsure about the cost of

Transcript of Evidence ("T.E."), January 6, 1987, page 38.

² T.E., page 38.

it. Mr. Young supported the pilot project by saying "...we ought to implement a pilot study to get a real grasp on what impact these retrofits and education have on reduction on the peak."

During the hearing Kentucky-American asked for guidance from the Commission on the pilot project. The Commission is directing Kentucky-American to submit a proposal for the pilot project to the Commission. The proposal should include a scope of work, an estimate of the costs and a timetable for conducting the pilot Based on this information the Commission will make a project. determination about conducting the pilot project. information should be submitted 6 weeks from the date of this Order.

During the course of the study several rate design issues were raised. Kentucky-American currently uses a declining block rate structure. During the evaluation EES looked at an inverted rate structure and seasonal rates as methods of encouraging more efficient use of water. The inverted rate structure was excluded from the final recommendations because the Commission thought it would result in rate shock. Seasonal rates would require monthly billing rather than quarterly, the billing system currently used by Kentucky-American.

The Commission believes Kentucky-American should consider rates that will encourage the efficient use of water. When

³ T.E., page 51.

⁴ T.E., page 72.

Kentucky-American conducts a new cost of service study, its rate proposal should include consideration of this factor. The Commission will not make a final decision in this case on rate design. However, in future rate cases, rate design will be analyzed to see if consideration was given to encouraging the efficient use of water.

Summary

The Commission, after consideration of the evidence of record and being advised, is of the opinion and finds that:

- 1. Kentucky-American has complied with Case No. 9283 which directed it to conduct a thorough reevaluation of its role in encouraging the efficient use of water resources by its customers and evaluating the role of programs to reduce demand in the system planning process.
- 2. Use of the leak detection van, plumbing code changes, and increased public education conducted by Kentucky-American are appropriate and effective methods of encouraging the efficient use of water resources.
- 3. More information on the cost and duration of a pilot project on retrofit devices is needed to determine if this program is a cost effective method of encouraging the efficient use of water resources.
- 4. Future rate design proposals should indicate consideration of encouraging the efficient use of water resources.

IT IS THEREFORE ORDERED that:

1. Kentucky-American shall continue use of the leak detection van, increase its role in public education and assist in

obtaining changes in the State Plumbing Code to encourage efficient use of water resources.

- 2. The information requested in this Order on a pilot project on retrofit devices shall be submitted within 6 weeks of the date of this Order.
- 3. Future rate design proposals shall indicate consideration of encouraging the efficient use of water resources.

Done at Frankfort, Kentucky, this 18th day of February, 1987.

PUBLIC SERVICE COMMISSION

Chairman
Vice Chairman

Williams

ATTEST:

Executive Director